

Title (en)

INERT ALLOY ANODE USED FOR ALUMINUM ELECTROLYSIS AND PREPARATION METHOD THEREFOR

Title (de)

INERTE ANODE FÜR ALUMINIUMELEKTROLYSE UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ANODE EN ALLIAGE INERTE UTILISÉE POUR L'ÉLECTROLYSE D'ALUMINIUM ET PROCÉDÉ DE PRÉPARATION ASSOCIÉ

Publication

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Application

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Abstract (en)

[origin: EP2860291A1] The present invention discloses an inert alloy anode for aluminum electrolysis, which contains Fe and Cu as primary components and further contains Sn; addition of the metal Sn contributes to formation of an oxide film with strong oxidization resistance and stable structure on the surface of the inert alloy anode and to improvement of the corrosion resistance of the anode; on this basis, the inert alloy anode further contains Ni, Al and Y, addition of the metal Al can prevent the primary metal components from being oxidized, and addition of the metal Y can control alloy to present a desired crystal form in the preparation process to achieve the purpose of oxidization resistance. The inert alloy anode with Fe and Cu as primary components is low in overvoltage, high in electric conductivity, low in cost and applicable to aluminum electrolysis industry.

IPC 8 full level

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Citation (search report)

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- See references of WO 2013185539A1

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